ANL/DIS/CP-82577
Conf-9404140--1

**ENVIRONMENTAL AND SAFETY OBLIGATIONS
OF THE CHEMICAL WEAPONS CONVENTION**

Presented to the:

American Society of International Law
1994 Annual Meeting
Washington, D.C.

April 7, 1994

The submitted manuscript has been authored by a contractor of the U. S. Government under contract No. W-31-109-ENG-38. Accordingly, the U. S. Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or allow others to do so, for U. S. Government purposes.

Presented by:

Edward A. Tanzman
Manager, Economics and Law Section
Argonne National Laboratory
9700 South Cass Avenue
Argonne, IL 60439-4832
(708) 252-3263

Work supported by Argonne National Laboratory under contract to BDM International, Inc., under contract to the U.S. Defense Nuclear Agency through contract DNA001-90-C-0177. The opinions expressed herein are those of the author and not necessarily those of Argonne National Laboratory or its sponsors.

MASTER *EP*
DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

ENVIRONMENTAL AND SAFETY OBLIGATIONS OF THE CHEMICAL WEAPONS CONVENTION

1 INTRODUCTION

Among its many unique and precedent-setting provisions, the Chemical Weapons Convention¹ (CWC) includes important requirements for States Parties to protect the public safety and the environment in the course of carrying out the treaty. These obligations will apply to the destruction of chemical weapons, of former chemical weapons production facilities, and to other activities under the Convention such as the verification scheme. This morning, I will briefly discuss the Convention's safety and environmental obligations, concentrating on their effects in this country as the United States chemical weapons stockpile is destroyed.

2 CONVENTION PROVISIONS FOR SAFETY AND ENVIRONMENTAL PROTECTION

The Convention's safety and environmental policy is comprised of several key provisions. The central reference to these protections is contained among the national implementation measures that each State Party is required to adopt. It states:

Each State Party, during the implementation of its obligations under this Convention, shall assign the highest priority to ensuring the safety of people and to protecting the environment, and shall cooperate as appropriate with other States Parties in this regard.²

This language is repeated in essentially the same form in the specific articles governing destruction of chemical weapons and former chemical weapons production facilities, with the added requirement that these activities be carried out by each State Party "in accordance with its national standards for safety and emissions."³ In addition to these affirmative safety and environmental protection responsibilities, the Convention specifically prohibits the chemical weapons destruction methods of "dumping in any body of water, land burial or open-pit burning."⁴

1. Draft Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, U.N. Doc. A/47/27 (23 September 1992) [hereinafter CWC]. This version of the CWC was signed by 130 nations in Paris, France, on January 13, 1993. As of April 1, 1994, 157 nations have signed the CWC.

2. *Id.* art. VII, ¶ 3.

3. *Id.* art. IV, ¶ 10 states that "[e]ach State Party, during transportation, sampling, storage, and destruction of chemical weapons, shall assign the highest priority to ensuring the safety of people and to protecting the environment. Each State Party shall transport, sample, store and destroy chemical weapons in accordance with its national standards for safety and emissions." Art. V, ¶ 11 imposes the same requirements on destroying chemical weapons production facilities.

4. *Id.* Verification Annex, Part IV (A), ¶ 13. However, since this provision is located in an Annex to the Convention -- where reservations are permitted -- it would be possible for a State Party to ratify the Convention while exempting itself from these restrictions. *Id.* art. XXII. Nevertheless, singling out these undesirable

States Parties are entitled to determine how they will "assign the highest priority" to safety and environmental protection as they destroy their chemical weapons and former production facilities, and during verification activities. It is difficult to see a practical basis in the Convention itself for States Parties or the Organization for the Prohibition of Chemical Weapons⁵ (OPCW), the body responsible for administering the Convention, to compel a particular destruction method. At most, this language gives States Parties or the OPCW the right to raise questions with respect to the ecological soundness of the destruction methods that are chosen.

The priority of protecting safety and the environment is not superior to the weapons destruction obligation. These provisions exist only in the context of the general obligation committing each State Party to "destroy chemical weapons it owns or possesses, or that are located in any place under its jurisdiction or control."⁶ In other words, the Convention contains no textual basis for concluding that a State Party can fail to destroy its chemical weapons within ten years because its safety or environmental laws prohibit it from doing so. However, perhaps these provisions can be read to furnish a basis for States Parties that are unable to comply with the Convention's requirement to destroy all chemical weapons within ten years after entry into force to request from the Conference of the States Parties of the OPCW an extension in the destruction deadline of up to five years.⁷ This may be of particular concern to the United States because the Russian Federation has encountered significant domestic resistance to previous chemical weapons destruction strategies because of fears for safety and environmental protection.

The Convention's safety and environmental protection provisions could lead to several other noteworthy consequences as it is implemented. First, this language could affect those States Parties, like the Peoples Republic of China, which are the location of chemical weapons abandoned by others, in this case allegedly by the Government of Japan after World War II.⁸ The Convention's requirements could provide those in China's position the leverage to negotiate for adoption of the most ecologically sound destruction method as the State Party largely responsible for destroying the weapons (in this case, Japan) carries out its obligations in this regard.⁹ Second, these provisions create a textual basis for domestic organizations, such as public interest groups, to urge adoption by States Parties of the safest and most environmentally protective destruction and verification methods available. Third, the Convention's environmental policies give States Parties the right to request assistance from other States Parties in order to comply with the Convention's safety and environmental requirements. This is especially important to

destruction methods and imposing on each State Party the burden of specifically including a reservation in order to retain them as options can be expected to make it more politically difficult to use them. Furthermore, paragraph 32 obligates a State Party to provide to the Technical Secretariat the safety plans and the environmental permits that have been obtained for each of its chemical weapons destruction facilities.

5. See generally *id.* note 1, art. VIII.

6. *Id.* art. I, § 2.

7. See *id.* pt. IV(A), C(24)-(28).

8. Doty, *The Challenge of Destroying Chemical Weapons*, ARMS CONTROL TODAY, Oct. 1992, at 29.

9. See CWC, *supra* note 1, Annex on Verification and Implementation, pt. IV(B).

destruction of the Russian chemical weapons stockpile, where such assistance has already been requested from the United States.

3 EFFECTS ON DESTRUCTION OF UNITED STATES CHEMICAL WEAPONS

The application of United States environmental law to destroying this nation's chemical weapons stockpile is one fascinating illustration of how the Convention's safety and environmental policy might operate. Since World War I, the United States has stockpiled both unitary and binary chemical weapons at eight domestic locations. The United States unitary stockpile consists chiefly of three types of chemical weapons -- mustard, GB, and VX.¹⁰ Mustard is a blister agent, meaning that it creates chemical burns and can be lethal if inhaled. GB and VX are nerve agents that both destroy the nervous system, with GB designed primarily to kill following inhalation and VX to kill upon skin contact. These agents are stored in several different ways, including in bulk tanks, in spray tanks, and in various munitions such as bombs, rockets, artillery projectiles, and mines. The agent that is weaponized is particularly difficult to destroy because the weapons are themselves dangerous to handle, with some in an unstable condition. The more modern binary stockpile is much safer to handle and destroy because each weapon consists of two separate components of nerve agent that are stored in different states, which cannot become chemical agent until they are purposely combined at the time of use.¹¹

The United States is already under a domestic deadline to destroy its unitary chemical weapons, pursuant to a federal statute requiring destruction to be completed by December 31, 2004,¹² in compliance with all federal and state environmental laws that apply. The estimated life cycle cost is more than \$8 billion.¹³ This initiative was undertaken by the U.S. Army because of growing concern that the unitary weapons, many of which date back to the 1950s or earlier, are increasingly dangerous to store as they deteriorate with age. An additional \$1.1 billion will be needed to destroy the binary weapons, former chemical weapons production facilities, and other items covered by the Convention.¹⁴

The massive unitary weapons destruction program has been the subject of risk and environmental studies that are controversial because, together, they justify high temperature incineration as the preferred weapons destruction method. This process includes a robotic system to punch and drain the munitions and tanks, a separate high temperature furnace to destroy the so-called energetics and propellants from

10. See generally President's Message to Congress Transmitting the *Environmental Review of the Chemical Weapons Convention*, § 2.1, reprinted in ___ Cong. Rec. S2168 (daily ed. March 1, 1994).

11. See *id.* § 2.2.2.1.

12. Defense Authorization Act of 1993, Public L. No. 102-484, § 171, ___ Stat. ___ (1993).

13. See M. Owen, Acting Assistant Secretary of the Army (Installations, Logistics and Environment), Testimony on the Chemical Demilitarization Program before the Subcommittee on Nuclear Deterrence, Arms Control, and Defense Intelligence of the U.S. Senate Committee on Armed Services, May 26, 1993, at 19.

14. PROGRAM MANAGER FOR NON-STOCKPILE CHEMICAL MATERIEL, NON-STOCKPILE CHEMICAL MATERIEL PROGRAM: SURVEY AND ANALYSIS REPORT at 9-1 (1993).

the drained munitions, and three additional furnaces to break down the nerve agent that has been collected as well as the residues that may remain on the drained munitions and tanks.¹⁵

Some have argued that incineration presents too great a risk of releasing deadly pollutants during destruction due to incomplete combustion or other inevitable malfunctions.¹⁶ However, a committee of the National Research Council has concluded that no alternate technology on the horizon appears to justify the even-greater risk of a catastrophic release of agent that would accrue while waiting for a better method to be perfected.¹⁷ Nevertheless, it appears that destruction of chemical weapons in the United States will continue to be politically sensitive,¹⁸ and it is fair to expect local opposition to incineration from some residents of some of the eight communities where the weapons destruction facilities are planned.

The Convention undoubtedly will affect this debate. The Convention's ten-year weapons destruction deadline adds an additional legal reason for proceeding without delay.¹⁹ Disputes that develop about weapons destruction will be resolved based not only on domestic safety and environmental values, but on the place these considerations occupy in the Convention and on international law.

One can imagine different hypothetical scenarios where these issues might be litigated. A likely arena for conflict between the Convention and local safety and environmental concerns would be an impossibly strict state environmental statute. For example, the Commonwealth of Kentucky, which has enacted a statute requiring the Army to prove that no alternative method of destruction "could be developed" that poses less risk, could refuse to issue a permit under its Clean Air Act state program for a chemical agent destruction facility at the Blue Grass Army Depot.²⁰ Alternatively, a citizens group could sue to enjoin incinerator operation, alleging, *inter alia*, that the United States has failed to "assign the highest priority" to safety as required by the Convention.

But it is doubtful that either of these imaginary suits would succeed. It is unlikely that a state law would be permitted by a federal court to stand in the way of incineration in the face of an Executive Branch determination that high temperature incineration is needed to meet the Convention's destruction

15. See President's Message to Congress Transmitting the *Environmental Review of the Chemical Weapons Convention*, § 2.1, reprinted in ___ Cong. Rec. S2168 (daily ed. March 1, 1994).

16. See, e.g., P. Costner, Chemical Weapons Demilitarization and Disposal: Johnston Atoll Chemical Disposal System, GB and VX Campaigns, at 1 (Paper presented at the Moscon '93 Conference, Moscow, Russian Federation, May 12, 1993).

17. NATIONAL RESEARCH COUNCIL COMMITTEE ON REVIEW AND EVALUATION OF THE ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM, *ET AL.*, RECOMMENDATIONS FOR THE DISPOSAL OF CHEMICAL AGENTS AND MUNITIONS, at 121 (1994).

18. See Doty, *The Challenge of Destroying Chemical Weapons*, ARMS CONTROL TODAY, Oct. 1992, at 26.

19. See President's Message to Congress Transmitting the *Environmental Review of the Chemical Weapons Convention*, § 4.2.1, reprinted in ___ Cong. Rec. S2168 (daily ed. March 1, 1994).

20. Doty, *The Challenge of Destroying Chemical Weapons*, ARMS CONTROL TODAY, Oct. 1992, at 26.

deadline.²¹ A citizens group claiming that incineration violates the Convention would stand even less of a chance because the language in the Convention requiring assignment of the highest priority to safety and environmental protection does not appear to create domestic citizens standing.

Nevertheless, the existence of some community concern about chemical weapons destruction is real. If a fight over chemical weapons destruction develops in some areas, it could be a bitter one that is better avoided by careful federal consideration of state and local safety and environmental apprehensions.²² The fact that the federal government is about to assume additional, international responsibilities for compliance under the Chemical Weapons Convention should not become an excuse for indifference to local worries. Fortunately, the federal government appears currently to be on a path intended to address these concerns.

4 CONCLUSIONS

The Chemical Weapons Convention not only promotes arms control, it challenges the legal community as well. The Convention's policies regarding safety and environmental protection will affect the relationship between international obligations and domestic law in novel ways. Careful planning that involves attorneys can help avoid unnecessary and destructive conflicts over the relative importance of the equally desirable goals of arms control and ecological responsibility.

21. See D. Gualtieri, B. Kellman, R. Haffenden, E. Tanzman, A. Loeb, and M. Anders, *Chemical Weapons Inspection of Private Facilities -- Application of United States Environmental and Safety Laws*, 49-51 (DNA-TR-93-70, 1993).

22. "Cooperation of executive and police officials of states and municipalities appears . . . clearly desirable and helpful. . . . There are certainly no obstacles under the laws of the United States to voluntary cooperation between states and municipalities and an international arms inspectorate." L. HENKIN, *ARMS CONTROL AND INSPECTION IN AMERICAN LAW* 102 (1958).

DATE

FILMED

7/18/94

END

1